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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,061	02/18/2005	Hisao Nakai	Q86405	5849

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EXAMINER

ANDERSON, REBECCA L

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1626

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,061	Applicant(s) NAKAI ET AL.	
	Examiner Rebecca L. Anderson	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13 and 14 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-11, 13 and 14 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claims 1-10, 13 and 14 are currently pending in the instant application and are subject to the following lack of unity requirement.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

- I. Claims 1-3, 7-10, 13 and 14 drawn to products of the formula (IA-1)
wherein Y is CH₂.
- II. Claims 1-3, 7-10, 13 and 14 drawn to products of the formula (IA-1)
wherein Y is O.
- III. Claims 1-3, 7-10, 13 and 14 drawn to products of the formula (IA-1)
wherein Y is S.
- IV. Claims 1-3, 7-10, 13 and 14 drawn to products of the formula (IA-1)
wherein Y is N.
- V. Claim 11 drawn to methods of use for products of the formula (IA-1)
wherein Y is CH₂.
- VI. Claim 11 drawn to methods of use for products of the formula (IA-1)
wherein Y is O.
- VII. Claim 11 drawn to methods of use for products of the formula (IA-1)
wherein Y is S.

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- VIII. Claim 22 drawn to methods of use for products of the formula (IA-1)
wherein Y is N.
- IX. Claims 1, 2, 4, 7-10, 13 and 14 drawn to products of the formula (IA-2)
wherein Y is CH₂.
- X. Claims 1, 2, 4, 7-10, 13 and 14 drawn to products of the formula (IA-2)
wherein Y is S.
- XI. Claims 1, 2, 4, 7-10, 13 and 14 drawn to products of the formula (IA-2)
wherein Y is O.
- XII. Claims 1, 2, 4, 7-10, 13 and 14 drawn to products of the formula (IA-2)
wherein Y is N.
- XIII. Claim 11 drawn to methods of use for products of the formula (IA-2)
wherein Y is CH₂.
- XIV. Claim 11 drawn to methods of use for products of the formula (IA-2)
wherein Y is S.
- XV. Claim 11 drawn to methods of use for products of the formula (IA-2)
wherein Y is O.
- XVI. Claim 11 drawn to methods of use for products of the formula (IA-2)
wherein Y is N.
- XVII. Claims 1, 2, 5, 7-10, 13 and 14 drawn to products of the formula (IA-3)
wherein Y is CH₂.
- XVIII. Claims 1, 2, 5, 7-10, 13 and 14 drawn to products of the formula (IA-3)
wherein Y is S.

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- XIX. Claims 1, 2, 5, 7-10, 13 and 14 drawn to products of the formula (IA-3) wherein Y is O.
- XX. Claims 1, 2, 5, 7-10, 13 and 14 drawn to products of the formula (IA-3) wherein Y is N.
- XXI. Claim 11 drawn to methods of use for products of the formula (IA-3) wherein Y is CH₂.
- XXII. Claim 11 drawn to methods of use for products of the formula (IA-3) wherein Y is O.
- XXIII. Claim 11 drawn to methods of use for products of the formula (IA-3) wherein Y is S.
- XXIV. Claim 11 drawn to methods of use for products of the formula (IA-3) wherein Y is N.
- XXV. Claims 1, 2, 6, 7-10, 13 and 14 drawn to products of the formula (IA-4) wherein Y is CH₂.
- XXVI. Claims 1, 2, 6, 7-10, 13 and 14 drawn to products of the formula (IA-4) wherein Y is O.
- XXVII. Claims 1, 2, 6, 7-10, 13 and 14 drawn to products of the formula (IA-4) wherein Y is S.
- XXVIII. Claims 1, 2, 6, 7-10, 13 and 14 drawn to products of the formula (IA-4) wherein Y is N.
- XXIX. Claim 11 drawn to methods of use for products of the formula (IA-4) wherein Y is CH₂.

- XXX. Claim 11 drawn to methods of use for products of the formula (IA-4) wherein Y is O.
- XXXI. Claim 11 drawn to methods of use for products of the formula (IA-4) wherein Y is S.
- XXXII. Claim 11 drawn to methods of use for products of the formula (IA-4) wherein Y is N.
- XXXIII. Claims 1, 2, 7-10, 13 and 14 drawn to products other than those found in the above product groups.
- XXXIV. Claim 11 drawn to methods of use for products other than those found in the above method groups.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

The claims herein lack unity of invention under PCT rule 13.1 and 13.2 since, under 37 CFR 1.475(a)

Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features...those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

Groups I-XXXIV lack unity of invention since under 37 CFR 1.475: the technical features corresponding to the claims is a compound of the formula (I) wherein ring A represents a nitrogen-containing heterocyclic ring and ring B represents a 5-membered heterocyclic ring wherein R is hydrogen or cyano. This technical features is not a special technical features because it fails to define a contribution over the prior art as can be seen, for example, by WO 02/14271 (see page 328, compound 314 or page

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308, compound 186); by WO 03/057666 (see example 22, page 36); or JP 9-509921 (page 17, compound 14). Therefore claims 1-11, 13 and 14 are not so linked as to form a single general inventive concept and there is a lack of unity of invention because they lack a special technical feature as the technical feature present fails to define a contribution over the prior art. Additionally, the variables found on the compounds vary extensively and when taken as a whole result in vastly different compounds.

Accordingly, unity of invention is considered to be lacking and restriction of the invention in accordance with the rules of unity of invention is considered to be proper.

Additionally, the vastness of the claimed subject matter, and the complications in understanding the claimed subject matter imposes a serious burden on any examination of the claimed subject matter.

Therefore, since the claims do not relate to a single general inventive concept under PCT Rule 13.1 and lack the same or corresponding special technical feature, the claims lack unity of invention and should be limited to only a product or a method of use.

Furthermore, in regards to groups I-XXXIV even if unity of invention under 37 CFR 1.475(a) is not considered lacking, which it is, under 37 CFR 1.475(b) a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and a process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or

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- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

And, according to 37 CFR 1.475(c)

if an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b), unity of invention might not be present.

Therefore, since the claims are drawn to more than a product and a method, and according to 37 CFR 1.475 (e)

the determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

The claims, therefore, lack unity of invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rebecca L. Anderson whose telephone number is (571) 272-0696. Mrs. Anderson can normally be reached Monday through Friday from 6:00am until 2:30pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Rebecca Anderson/
Primary Examiner, AU 1626*

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13 November 2007